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BAY DELTA CONSERVATION PLAN

Bay Delta Conservation Plan Overview

October 25, 2011

The Legal Delta:

738,000 acres

~ 60 islands/tracts

1,115 miles of levees

- 3 State Highways
- Major Rail Lines
- Major Water and Natural Gas Pipelines
- 1 Critical Natural Gas Reservoir
- 2 Deep Water Ports
- Major Power Transmission Lines

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Importance of the Delta to California

Water Supply

- 25 million Californians
- 3 million acres of agriculture
- $400 billion of annual economic activity

In-Delta Land Use

- 558,000 acres in agricultural production
- 64,000 acres of urban and commercial development

Environment

- Confluence of California's two largest watersheds (Sacramento River and San Joaquin River)
- More than 750 plant and animal species
- More than 40 threatened or endangered species

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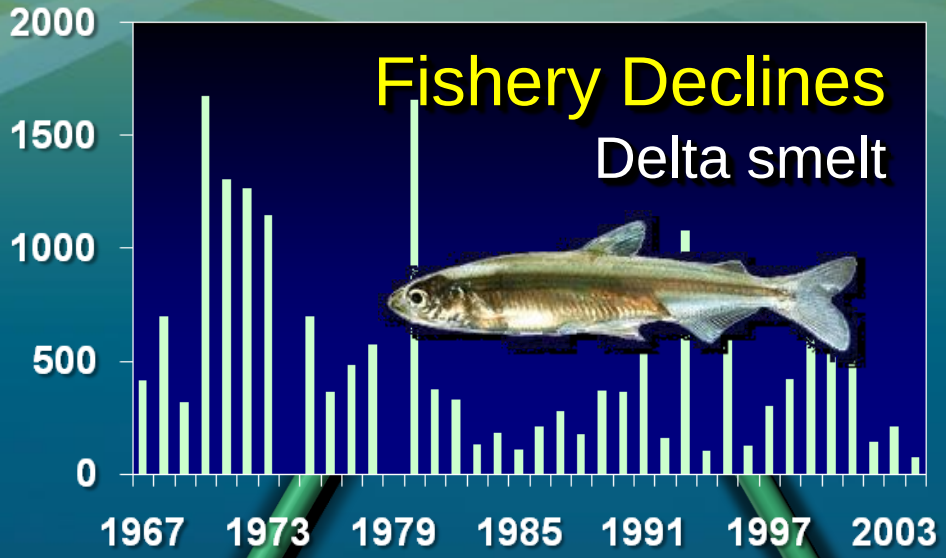
Key Delta Risks



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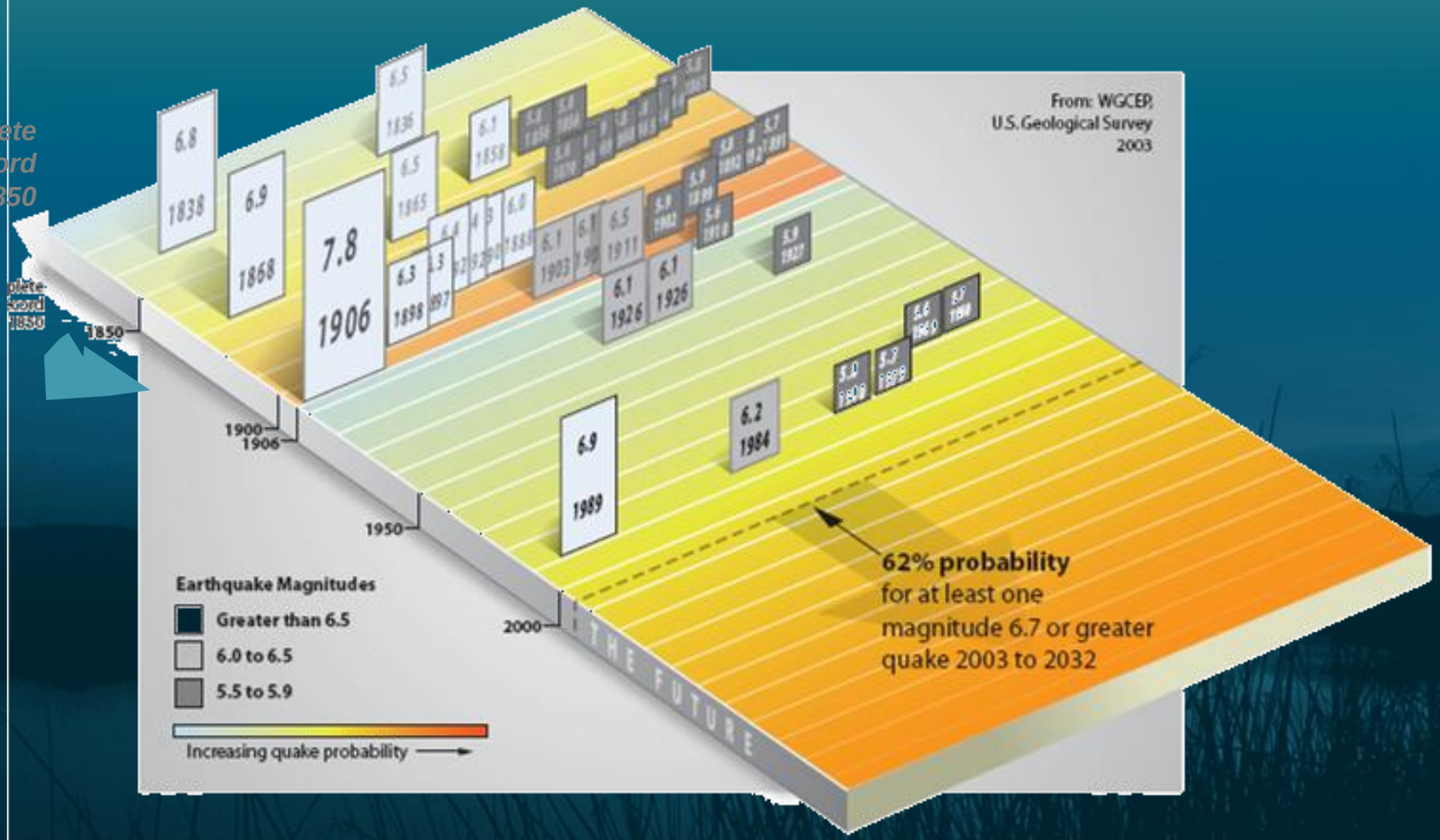
Seismic Challenges

Past and Future Seismic Events in the Bay-Delta Region



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Potential for Flooding

Jones Tract
Levee Breach - 2004

In 1997 there were 11 levee failures in the Delta

View of Levee Repair

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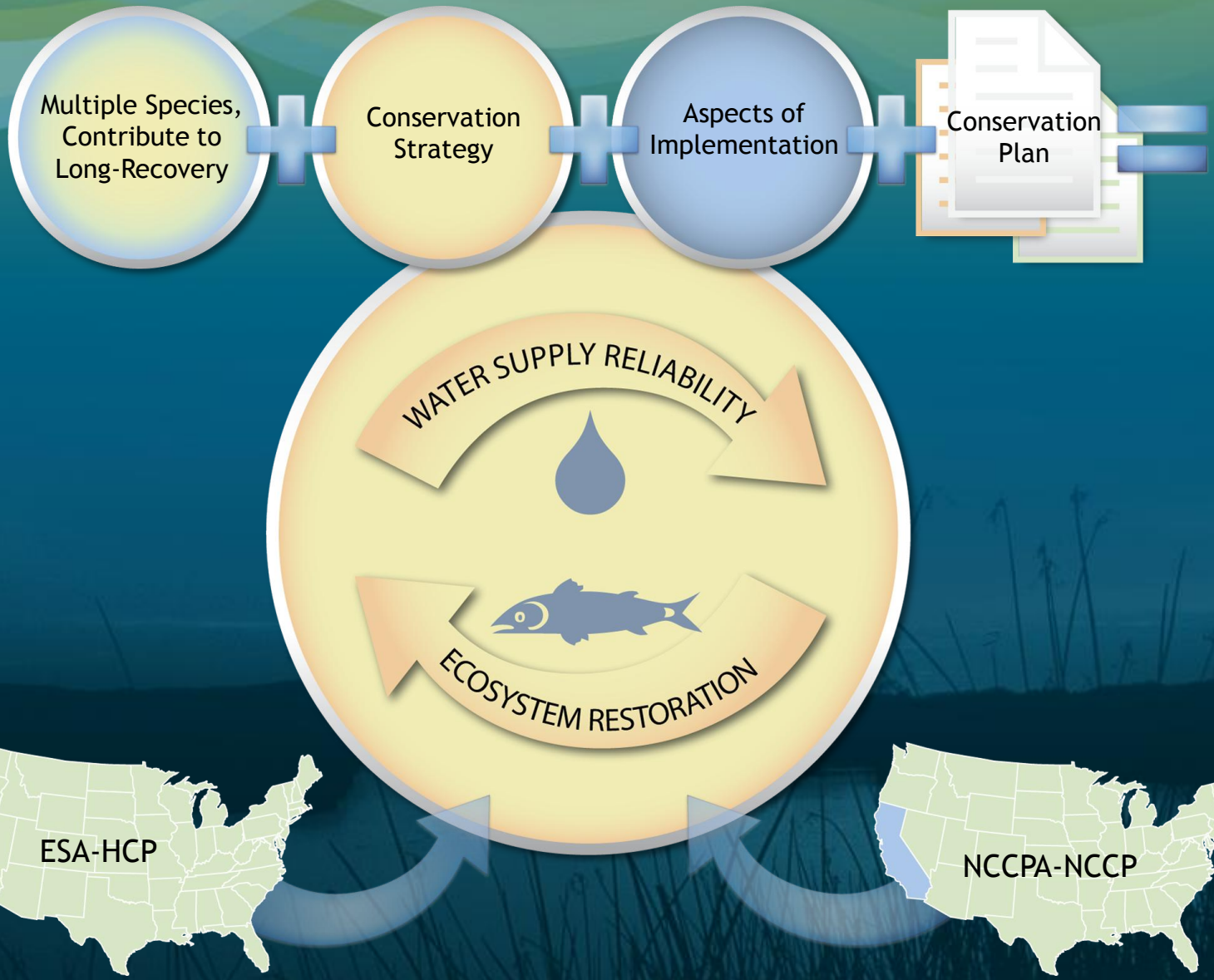
WHAT IS BDCP?



Importance to Long-term Solution

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- Comprehensive ecosystem approach provides best opportunities to recover fisheries and assure water supplies
- Better separates water delivery system from the Delta estuary
- Restores tens of thousands of acres of tidal marsh and flood plain habitat
- Improves Delta flows through greater operational flexibility
- Considers the many other stressors impacting fish populations – predation, invasive species, pesticides, toxins

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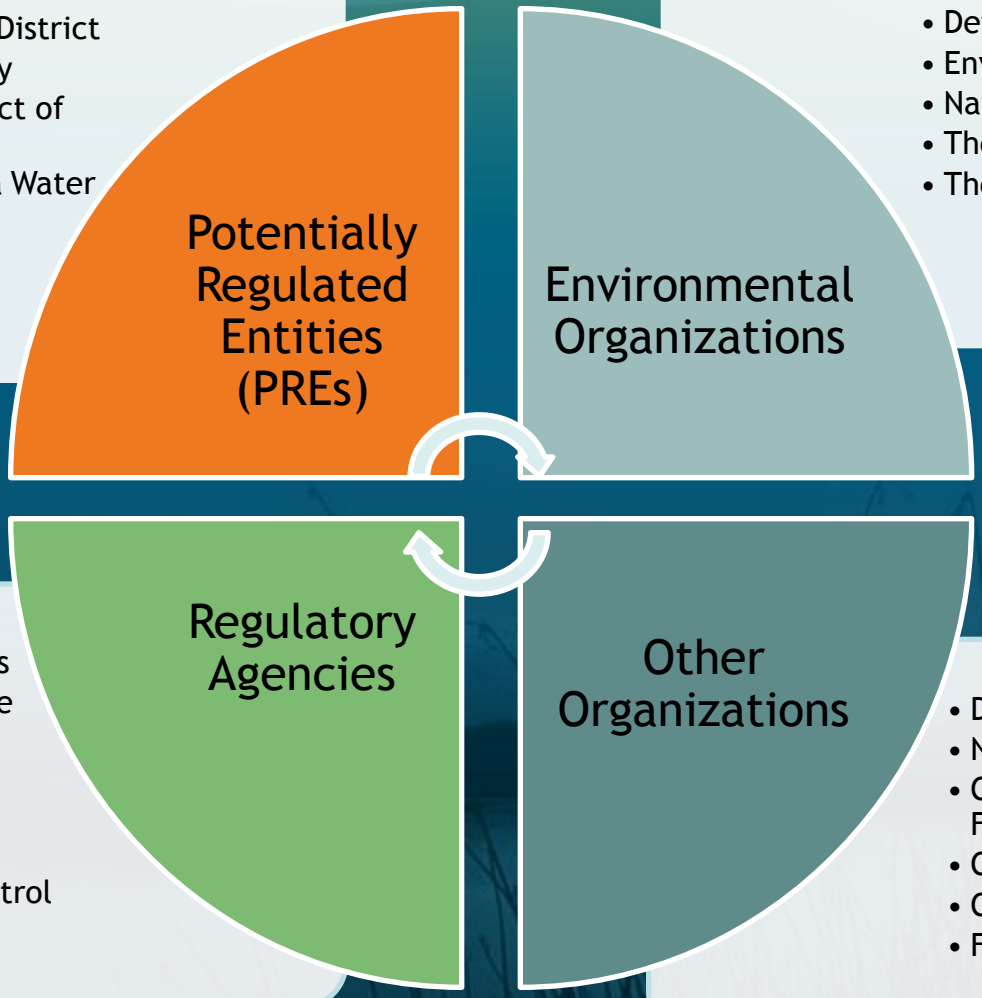
Who's Involved?



- Department of Water Resources
- US Bureau of Reclamation
- Santa Clara Valley Water District
- Kern County Water Agency
- Metropolitan Water District of Southern California
- San Luis & Delta-Mendota Water Authority
- Mirant Energy
- Westlands Water District
- Zone 7 Water Agency

- American Rivers
- Defenders of Wildlife
- Environmental Defense Fund
- Natural Heritage Institute
- The Bay Institute
- The Nature Conservancy

- US Army Corps of Engineers
- US Fish and Wildlife Service
- CA Department of Fish and Game
- National Marine Fisheries Service
- State Water Resources Control Board

- Delta Stewardship Council
- North Delta Water Agency
- California Farm Bureau Federation
- California Resources Agency
- Contra Costa Water District
- Friant Water Authority

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COVERED SPECIES

DELTA SMELT

LONGFIN SMELT

CHINOOK SALMON

winter, spring, fall and late fall

GREEN AND WHITE STURGEON

CENTRAL VALLEY STEELHEAD

SACRAMENTO SPLITTAIL

APPROXIMATELY 50 TERRESTRIAL SPECIES

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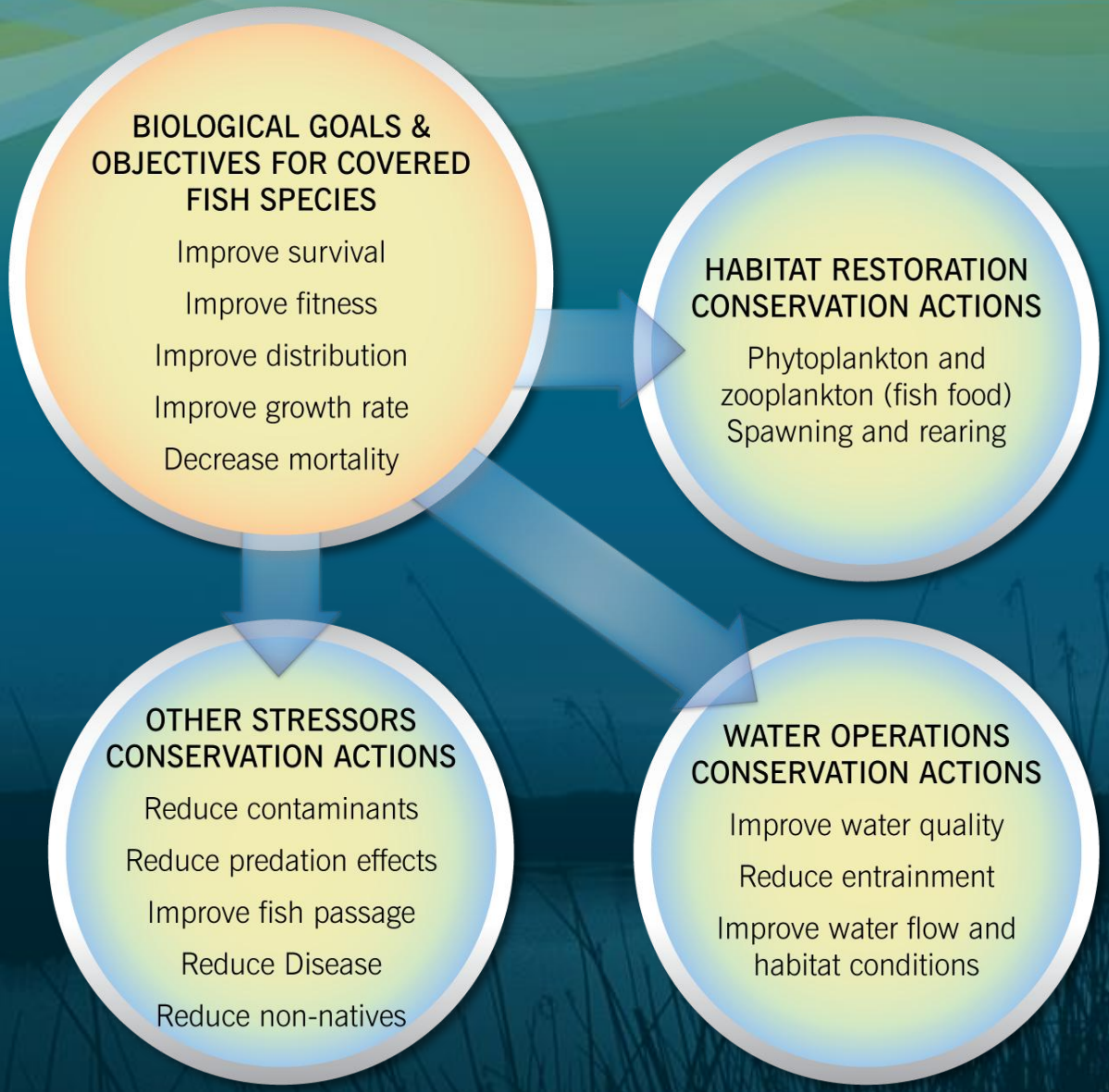
AQUATIC CONSERVATION MEASURES



Draft Conservation Strategy – Major Elements

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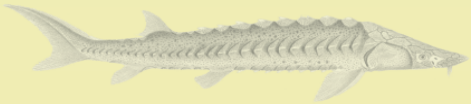
HABITAT RESTORATION

- Up to 80,000 acres tidal marsh, riparian, and floodplain
- Enhanced floodplain in the Yolo Bypass-temporary inundation
- 20-40 linear miles channel restoration
- Up to 45,000 acres of terrestrial habitat



WATER FACILITIES & OPERATIONS

- North Delta diversion
  - Up to 5 intakes
  - Up to 15,000 cfs design capacity
  - Pipeline/tunnel subject of focused study in BDCP
  - Establish minimum flows to ensure healthy habitat and water quality
  - Minimize reverse flows
  - Provide freshwater outflow
  - Maintain water quality standards
  - Manage operating rules for flows at Delta Cross Channel
- Manage operating rules for flows at Rio Vista

OTHER STRESSORS

- Minimize methyl mercury
- Control non-native aquatic plants
- Reduce illegal harvest
- Establish hatchery and genetic management plans
- Support Delta and longfin smelt propagation programs
- Reduce predators
- Construct non-physical barriers to re-direct juvenile salmonids
- Improve dissolved oxygen levels in the Stockton Deep Water Ship Channel

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Current BDCP Efforts

- ICF initiating effects analysis that uses scientific modeling to predict the impacts of the conservation measures on biological resources.
  - Draft Conceptual Foundation and Analytical Framework is a road map
  - Draft Entrainment Appendix to be viewed as an example of application of methods
- Your review will help us guide Effects Analysis
  - Will also assist with the overall BDCP

BDCP Outline

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BDCP Chapter 5 (Effects Analysis) Schedule
8/9/11

Task	Date to Agencies	Review Complete
BDCP: Chapter 5: Conceptual Foundation & Analytical Framework		
Technical Appendix (Conceptual Foundation)	8-Aug-11	24-Aug-11
Technical Appendix (Analytical Framework)	8-Aug-11	24-Aug-11
BDCP: Chapter 5: Entrainment		
Technical Appendix (Entrainment)	24-Aug-11	14-Sep-11
Delta Science Review (C. Foundation, A. Framework, Entrainment)	15-Sep-11	14-Oct-11
BDCP: Chapter 5: Flow, Passage, & Salinity		
Technical Appendix (Flow, Passage & Salinity)	30-Sep-11	21-Oct-11
BDCP: Chapter 5: Water Quality		
Technical Appendix (Water Quality)	14-Oct-11	4-Nov-11
BDCP: Chapter 5: Fish Population Analysis		
Technical Appendix (Fish Population Analysis)	25-Nov-11	16-Dec-11
BDCP: Chapter 5: Habitat Restoration		
Technical Appendix (Habitat Restoration)	16-Dec-11	6-Jan-12
BDCP: Chapter 5: Ecological Effects		
Technical Appendix (Ecological Effects)	16-Dec-11	20-Jan-12
BDCP: Chapter 5: Appendix - Analysis Not Used		
Technical Appendix (Analysis Not Used)	16-Dec-11	6-Jan-12
BDCP: Chapter 5: Terrestrial Species Analysis		
Technical Appendix (Terrestrial Species Analysis)	16-Nov-11	16-Jan-12
BDCP Chapter 5 (Roll-up)		
Agency and Delta Science Review	27-Feb-12	27-Mar-12
BDCP Chapter 5 (Effects Analysis)		
Chapter 5 Complete	9-Apr-12	

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Environmental Review Process

The EIR/EIS will evaluate the effects of the conservation plan on both the natural (biological) and the human environment. This will include addressing impacts to:

- Cultural Resources
- Archaeological Resources
- Recreation
- Tourism
- Air Quality
- Water Quality
- Climate Change
- Economics
- Hazardous materials
- Utilities
- Local Communities
- Environmental Justice
- And more…

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ENVIRONMENTAL REVIEW PROCESS

Proposed Action: Bay Delta Conservation Plan